

100

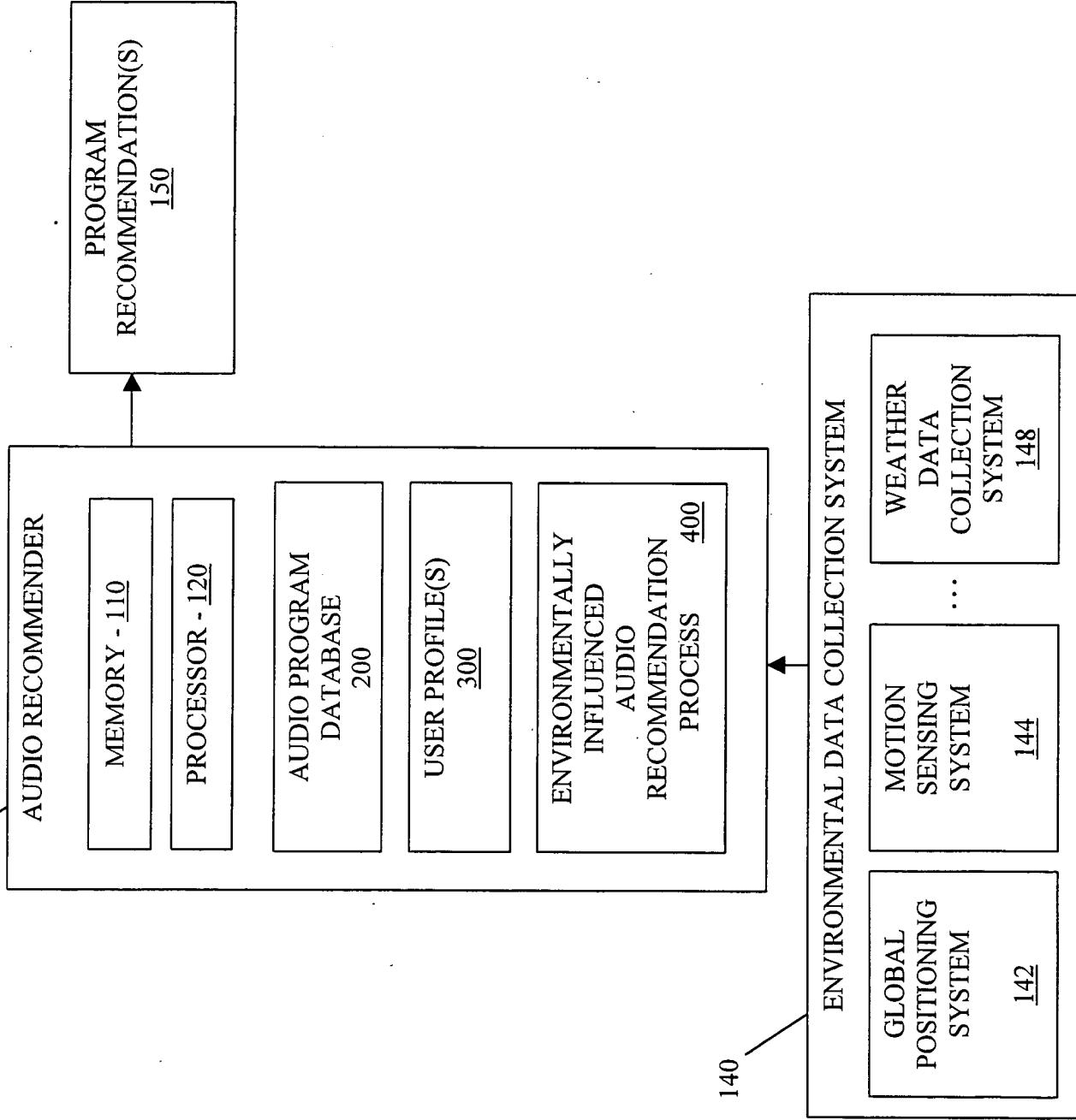


FIG. 1

AUDIO PROGRAM DATABASE - 200

| | DATE/TIME | STATION | GEOGRAPHIC AREA | TITLE | PROGRAM TYPE(S) | ... | PERFORMERS |
|-----|---------------------------------|-------------|-----------------|----------------------|---|-----|----------------------------------|
| 205 | 240 11/18/99 -- 8:00 P.M. | WPXI 245 | NYC 248 | CASEY'S COUNTDOWN | 250 | 255 | <u>270</u> VARIOUS ARTISTS |
| 210 | 11/18/99 -- 8:30 P.M. | WNWE ... | PHILADELPHIA | FINANCE UPDATE | TOP 40 | | JOE BANKER |
| 220 | 11/18/99 -- 9:00 P.M. | WPJL NYC | | GREATEST HITS | FINANCE; TALK;TRAFFIC ADULT CONTEMPORAR Y | | VARIOUS ARTISTS |

FIG. 2

LISTENING HISTORY (POSITIVE EXAMPLES) 300-1

| | TIME | STATION | PROGRAM TYPE | ... PROGRAM TYPE | ... PERFORMERS | ENVIRONMENTAL OBSERVATIONS | CLASS |
|-----|-------------|--------------------|--------------|------------------------|--------------------------|--|-------|
| 301 | 320 1930 | 325 <u>WPAX</u> | TOP 40 | N 330 335 N/A | VARIOUS ARTISTS 340 | LOCATION(S): WESTCHESTER COUNTY 345 350 POS | |
| 302 | ... | ... | ... | ... | JOE BANKER (HOST) ... | ... | |
| 303 | 1900 | WTKU | TALK RADIO | TRAFFIC; FINANCE | | LOCATION CHARACTERISTICS: URBAN CITY WEATHER: PARTIALLY CLOUDY; 50 DEGREES MOVEMENT CHARACTERISTICS: 15 MPH; STOP-AND-GO TRAFFIC | POS |

FIG. 3A

LISTENING HISTORY (NEGATIVE EXAMPLES) 300-2

| TIME | STATION | PROGRAM TYPE | PROGRAM TYPE | ... PERFORMERS | ENVIRONMENTAL OBSERVATIONS | CLASS |
|------|---------|--------------|--------------|-------------------------------|---|---|
| 320 | 325 | N | N | 340 | 345 | 350 |
| 0530 | WCTR | COUNTRY | NASHVILLE | FAITH RHYMES; TIM GARTH | LOCATION(S): WESTCHESTER COUNTY | NEG |
| | | | | | LOCATION CHARACTERISTICS: SUBURBAN; RURAL | |
| | | | | | WEATHER: CLEAR; SUNNY | |
| | | | | | MOVEMENT CHARACTERISTICS: 55 MPH | |
| 306 | ... | ... | ... | ... | ... | ... |
| 307 | 1400 | WPJL | CLASSICAL | TRAFFIC; WEATHER | JANE MUSIC (HOST) | LOCATION(S): NEW YORK CITY |
| | | | | | | CHARACTERISTICS: URBAN |
| | | | | | | WEATHER: PARTIALLY CLOUDY; 50 DEGREES |
| | | | | | | MOVEMENT CHARACTERISTICS: 15 MPH; STOP-AND-GO TRAFFIC |

FIG. 3B

USER PROFILE 360

| | RULE IDENTIFIER | CONDITIONS | RECOMMENDATION |
|-----|----------------------|---|-------------------------|
| 371 | RULE 1 380 | TIME > 1830 & TIME <= 1930 & PROGRAM TYPE = TALK RADIO & LOCATION CHARACTERISTICS=URBAN 385 | 390 POS [98.5%] |
| 372 | RULE 2 | TIME > 1430 & PROGRAM TYPE = TOP 40 & WEATHER = SUNNY | POS [96.5%] |
| 373 | RULE 3 ... 374 | TIME > 600 & MOVEMENT CHARACTERISTICS = AVG SPEED > 45 MPH ... RULE N DEFAULT | NEUTRAL NEG [100.0%] |

FIG. 3C

ENVIRONMENTALLY INFLUENCED
AUDIO RECOMMENDATION
PROCESS

400

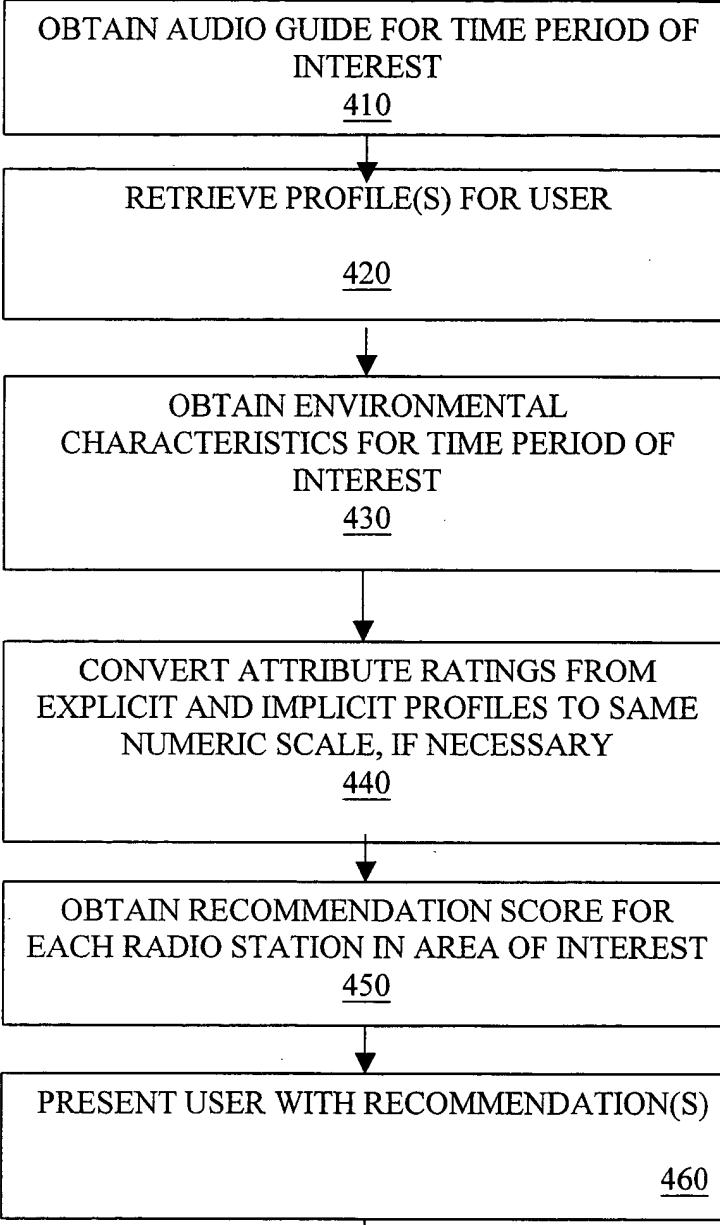


FIG. 4